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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,116	02/13/2006	Gottfried Rieger	2003P13100WOUS	5505

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SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER	
KESSLER, MATTHEW E	

ART UNIT	PAPER NUMBER
4121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,116	RIEGER ET AL.	
	Examiner	Art Unit	
	Matthew E. Kessler	4121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) *1-9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 February 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/13/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-18 are pending.

2. Claims 1-9 are cancelled.

3. Claims 10-18 are rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson Patent Number 6788980 (hereinafter Johnson) in further view of Stephenson et al. Patent Application Number 2002/0023143 (hereinafter Stephenson).

As to claim 10, Johnson teaches a Human-Machine-Interface (HMI) system, comprising:

at least one mobile operating and monitoring device for controlling automation components of a technical installation (Column 1 lines 21-45 generally teach control systems. Specifically lines 33-36 teach "In other control systems, such **apparatus monitor the device,** process or system and display alarms or other indicia of its characteristics, **leaving responsibility for adjustment to the operator.**");

a radio link for wireless data transmission between the mobile operating and monitoring device and the automation components (Column 6 lines 4-7 teach "Apparatus 40-44 can couple with the control network directly, e.g., via bus or network connection, or indirectly, e.g., via satellite, **wireless connection** or modem connection.");

but does not teach a first firewall for securing data transmission from the automation components to the mobile operating and monitoring device; and a second firewall for securing data transmission from the mobile operating and monitoring device to the automation components.

However in an analogous art, Stephenson, teaches a first firewall for securing data transmission from the automation components to the mobile operating and monitoring device (The abstract teaches "A server may receive the information as posted through a browser client from beyond a **first firewall** and relay it to another client beyond a second firewall without lowering the security levels of the firewalls." Furthermore, Stephenson teaches in paragraph [0045] that the implementation of the two firewalls can be used in a wireless, i.e. mobile, environment.); and

a second firewall for securing data transmission from the mobile operating and monitoring device to the automation components (The abstract teaches "A server may receive the information as

posted through a browser client from beyond a first firewall and relay it to another client beyond a **second firewall** without lowering the security levels of the firewalls." Furthermore, Stephenson teaches in paragraph [0045] that the implementation of the two firewalls can be used in a wireless, i.e. mobile, environment.).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Johnson's automation control system with Stephenson's teaching of using 2 firewalls because as Johnson states in section 5.5.1.2 Security that "The native communications system is linked to the native security system to ensure that unauthorized users are unable to access objects." It is clear that Johnson has taken measures to secure the automation control system to unauthorized users. One such method for security would be to include Stephenson's teaching of multiple firewalls in a mobile computing system.

As to claim 11, the combination of Johnson and Stephenson as disclosed in claim 10 discloses the claimed invention except for the first and second firewalls include essentially the same security procedures. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the same procedures on the firewalls, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

As to claim 12, combination of Johnson and Stephenson as disclosed in claim 10 discloses the claimed invention except for the first firewall is an integral part of the mobile operating and monitoring device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the firewall integrated into the mobile operating and monitoring device, since it has been held that forming in one piece an article which has formally been formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

As to claim 13, the HMI system in accordance with claim 12 (the combination of Johnson and Stephenson teach all of the limitations of claim 12), wherein the mobile operating and monitoring device is encapsulated (In column 5 line 63 – column 6 line 7, Johnson teaches the mobile device being a laptop or handheld computer. These devices are encapsulated.).

As to claim 14, the combination of Johnson and Stephenson as disclosed in claim 10 discloses the claimed invention except for the second firewall is an integral part of at least one of the automation components. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the firewall integrated into the automation components, since it has been held that forming in one piece an article which has formally been formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

As to claim 15, the combination of Johnson and Stephenson as disclosed in claim 14 discloses the claimed invention except for the second firewall being an integral part of the radio interface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the firewall integrated into the radio interface, since it has been held that forming in one piece an article which has formally been formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

As to claim 16, Johnson teaches wherein the automation components are connected by a field bus (Column 2 lines 15-27 "The field devices, controllers, workstations and other components that make up a process control system typically communicate over heterogeneous media. Field devices connect with controllers, for example, over dedicated "fieldbuses" operating under proprietary or industry-specific protocols.").

The combination of Johnson and Stephenson as disclosed in claim 15 and in light of the above teaching of fieldbuses discloses the claimed invention except for the radio interface connected to the field bus. It would have been obvious to one having ordinary skill in the art at the time the invention was made to connect the radio interface with the field bus, since it has been held that forming in one piece an article which has formally been formed in two pieces and put together involves only routine skill in the art, especially since

the idea of field buses being an industry wide effort to define a uniform protocol for communications among processor-equipped field devices.. Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

As to claim 17, wherein the automation components include a radius server (In column 11 lines 26-37 Johnson teaches "Inter-system access is provided by a gateway device, such as **server** 47, that permits the **secure transfer of data**. This device negotiates secure access, deals with name conflicts between systems, and provides support for various physical media A pair of such devices are provided to account for situations where the source is local to the sink. In a preferred system, the server 47 or other gateway encrypts the data so that others cannot read it. Likewise, it **authenticates** message sources to verify that they are coming from a matching device. A preferred gateway minimizes the number of packet transfers so as to minimize delays over slow or high latency links. A radius server is a remote authentication dial in user service. Here we can see that a server is providing authentication services. Johnson teaches a radius server being implemented in the system.).

As to claim 18, the combination of Johnson and Stephenson as disclosed in claim 15 and Johnson teaches a radius server being implemented in the system (see claim 17) but does not teach the specific limitation of `the automation components include a radius server connected to the field bus`. It would have been obvious to one having ordinary skill in the art at the time the invention was made to connect the radius server with the field bus, since it has been held that forming in one piece an article which has formally been formed in two pieces and put together involves only routine skill in the art, especially since the idea of field buses being an industry wide effort to define a uniform protocol for communications among processor-equipped field devices. Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kilgore, Patent Application # 20020166068, directed to multiple firewalls for use in a wireless system;

Papadopoulos et al., Patent # 6061603, directed to remote access to industrial control systems;

Nixon et al., Patent # 5909368, directed to distributed control systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Kessler whose telephone number is (571) 270-5005. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571)272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MK/

/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 4121
2/15/2008